UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 1 – NEW ENGLAND

IN THE MATTER OF	
Safety-Kleen Systems, Inc.)
167 Mill Street) NOTICE OF VIOLATION
Providence, Rhode Island, 02905	
Proceeding under Section)
113 of the Clean Air Act)

I. STATUTORY AUTHORITY

- 1. The United States Environmental Protection Agency ("EPA"), Region 1 issues this Notice of Violation ("NOV") to Safety-Kleen Systems, Inc. ("Safety-Kleen"), for violations of the Clean Air Act ("CAA" or "Act") and the CAA's implementing regulations at a facility owned and operated by Safety-Kleen in Cranston, Rhode Island. Specifically, EPA Region 1 has identified violations of federal hazardous air pollutant standards, Title V operating permit requirements, and Rhode Island State Implementation Plan ("Rhode Island SIP") requirements.
- 2. This NOV is issued under Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), which requires that, whenever EPA finds that any person has violated or is in violation of any requirement or prohibition of an applicable SIP, EPA shall notify the person of such finding. Separately, this NOV includes EPA's findings regarding certain violations by Safety-Kleen of federal hazardous air pollutant regulations at 40 C.F.R. Part 63, Subparts DD and EEEE, and of the CAA's Title V operating permit requirements.

- 3. Section 110(a) of the CAA, 42 U.S.C. § 7410(a), requires each state to prepare a SIP incorporating regulations designed to attain and maintain healthy air quality. A state must submit its SIP and any SIP revisions to EPA for approval. Once EPA has approved a SIP, it may enforce the SIP's requirements and prohibitions pursuant to Section 113 of the CAA, 42 U.S.C. § 7413.
- 4. EPA has approved the Rhode Island SIP under Section 110 of the CAA, 42 U.S.C. § 7410. The SIP contains various federally-approved ("SIP-approved") portions of the Rhode Island Air Pollution Control Regulations ("RI APC Regulations"). A version of the SIP can be accessed at http://www.epa.gov/region1/topics/air/sips/sips_ri.html.
- 5. Section 112 of the CAA, 42 U.S.C. § 7412, lists various hazardous air pollutants and requires EPA to establish national emissions standards for sources that emit these pollutants.
- 6. Pursuant to Section 112 of the Act, EPA has promulgated the National Emission Standards for Hazardous Air Pollutants From Off-Site Waste and Recovery Operations, found at 40 C.F.R. Part 63, Subpart DD ("Subpart DD").
- 7. Pursuant to Section 112 of the Act, EPA has also promulgated the National Emissions Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline), found at 40 C.F.R. Part 63, Subpart EEEE ("Subpart EEEE").
- 8. Subchapter V of the CAA ("Title V"), 42 U.S.C. §§ 7661 7661f, establishes operating permit programs under the CAA. States must develop and submit operating permit programs for EPA approval. Rhode Island has an approved Title V operating permit program, set out in RI APC Regulation 29. See 66 Fed. Reg. 49839 (Oct. 1, 2001).

II. BACKGROUND INFORMATION

- 9. Since 2007, Safety-Kleen has owned and operated a facility located at 167 Mill Street in Cranston, Rhode Island ("Cranston Facility" or "Facility"), that receives, stores, treats and disposes of various hazardous and non-hazardous wastes.
- 10. The Cranston Facility began operating in the mid-1970s under the name Chem-Pak. In 2003, United Oil Recovery Inc. ("United Oil") purchased the Facility. In 2007, United Oil sold the Facility to Safety-Kleen.
- 11. On December 28, 2012, Clean Harbors, Inc., a publicly-traded Massachusetts corporation, completed a transaction whereby Safety-Kleen, Inc. and its subsidiaries, including Safety-Kleen Systems, Inc., were acquired by Clean Harbors. Since that date, Safety-Kleen, Inc., and its subsidiaries, including Safety-Kleen Systems, Inc., have been wholly-owned subsidiaries of Clean Harbors, Inc.
- 12. The Cranston Facility began treating and storing hazardous waste in 1978, applied for a hazardous waste treatment, storage and disposal permit ("TSDF permit") from the Rhode Island Department of Environmental Management (RI DEM") in 1984, and was issued its first TSDF permit in 1986. The Cranston Facility is currently operating under its latest TSDF permit, which was issued by RI DEM on July 30, 2012 and which expires on January 1, 2016.
- 13. On December 4, 2013, EPA Region 1 conducted a CAA compliance inspection at the Cranston Facility.
- 14. On June 6, 2104, EPA Region 1 issued an Information Request to Safety-Kleen and to Clean Harbors Environmental Services ("Clean Harbors") for information

regarding the Cranston Facility's compliance with the CAA, the Resource Conservation and Recovery Act ("RCRA"), and these statutes' implementing regulations.

 Clean Harbors submitted responses to the Information Request in August and September 2014.

III. FACTUAL/LEGAL BASES AND NOTICE OF VIOLATION

A. CAA Major Source Status

- 16. Sections 112(a)(1) and 501 of the CAA, 42 U.S.C. §§ 7412(a)(1) and 7661, define the term "major source" to include any source that has the potential to emit more than 10 tons per year of any hazardous air pollutant ("HAP") or more than 25 tons per year of any combination of HAPs.
- 17. Based on information obtained from EPA's CAA inspection and provided by Clean Harbors and Safety-Kleen in its 2013 self-disclosures to EPA and its 2014 Information Request responses, EPA has determined that the Cranston Facility has the potential to emit more than 10 tons per year of a single HAP, and thus is a CAA major source as defined above.

B. Violations of 40 C.F.R. Part 63, Subpart DD

18. Subpart DD applies to the owner and operator of any facility ("plant site") that (a) is a major CAA HAP source, and (b) includes a waste management operation that receives "off-site material" and that is regulated as a TSDF under RCRA regulations at 40 C.F.R. Parts 264. See 40 C.F.R. §§ 63.680(a)(1) and (a)(2)(i). "Off-site material" includes wastes, used oil, or used solvents that are delivered or transferred to the

facility (not produced there) and that contain one or more of the HAPs listed in Subpart DD's Table 1. See 40 C.F.R. §§ 63.680(b)(1)(i) – (iii).

- 19. The Cranston Facility is a major CAA HAP source that has been operating as a permitted hazardous waste management TSDF facility since the mid-1980s.
- 20. In addition, the Facility's waste management operations receive off-site materials wastes, used oils, and used solvents that contain one or more Table 1 HAPs. For example, in 2012 and 2013, the Facility received offsite materials containing the following Table 1 HAPs: acetonitrile, benzene, chloroform, hexane, methanol, methylene chloride, tetrachloroethylene, toluene, trichloroethane, trichloroethylene, and xylene.
 - 21. Accordingly, the Cranston Facility is subject to Subpart DD.
- 22. Regulated "affected sources" at a Subpart DD-subject facility such as the Cranston Facility include "off-site management units," "process vents," and "equipment leaks." See 40 C.F.R. § 63.680(c).
- 23. "Off-site management units" are defined to include tanks and containers used to manage off-site materials. Tanks or containers equipped with a vent serving as a process vent are regulated as "process vents." See 40 C.F.R. § 63.680(c)(1).
- 24. "Process vents" are defined to include "the entire group of process equipment associated with the process vents" for various waste treatment processes, including a "[d]istillation process used for the treatment, recycling or recovery of off-site material." See 40 C.F.R. §§ 63.680(c)(2) and (c)(2)(i).

- 25. From at least 2004 to 2013, the Cranston Facility has distilled HAP-containing wastes and used solvents, such as waste perchloroethylene and degreaser solvents, using a distiller connected by vents and piping to four waste storage tanks (Tanks 10 to 13), a blending tank (Tank 14), and four distillate receiving tanks (Tanks 15 to 18). HAP-containing emissions from this distillation process have been routed through a regenerative carbon adsorption system and discharged continuously or intermittently through one or more process vents into the atmosphere.
- 26. Accordingly, the Cranston Facility's distillation process is an "affected source" under Subpart DD and is subject to Subpart DD's standards and requirements for process vents set out in 40 C.F.R. §§ 63.690 and 63.693. The Cranston Facility's tanks that feed into the distillation process are also an "affected source" and are subject to Subpart DD's standards and requirements either for off-site waste management units (set out in 40 C.F.R. § 63.685) or for the distillation process.
- 27. Subpart DD requires an owner and operator of an affected source to submit various notices and reports regarding Subpart DD compliance. See 40 C.F.R. § 63.697(a). Additional reports are required for owners and operators using a control device to comply with the requirements for closed vent systems and control devices set out in 40 C.F.R. § 63.693.
- 28. To date, Safety Kleen has not submitted any Subpart DD notices or reports to EPA. Accordingly, Safety-Kleen has violated and continues to violate 40 C.F.R. § 63.697.

- 29. Subpart DD's standards for process vents set out in 40 C.F.R. § 63.690 require that vent stream emissions be routed through a closed-vent system to a control device that meets the standards set out in 40 C.F.R. § 63.693.
- 30. Subpart DD's standards for closed-vent systems and control devices require, among other things, that with certain limited exceptions the control device must be operating whenever gases or vapors containing HAP are vented through the closed-vent system to the control device. See 40 C.F.R. § 63.693(b)(3). A carbon-adsoprtion control device must recover 95% or more, on a weight basis, of the total organic compounds (less methane and ethane) or of the total HAPs listed in Subpart DD's Table 1 that are contained in the vent stream entering the carbon adsorption system. See 40 C.F.R. § 63.693(d)(1).
- 31. The Cranston Facility's regenerative carbon adsorption system was tested on December 8-9, 2011 at Safety-Kleen's request by Process Engineering Services, Inc. ("Process Engineering"), a consulting firm specializing in carbon adsorption systems.

 Process Engineering provided an "Efficiency Testing Report" ("Test Report" or "Report") to Safety-Kleen regarding this testing via cover letter dated December 17, 2011.
- 32. During Process Engineering's two days of testing in December 2011, the removal efficiency of Safety-Kleen's carbon adsorption system never met the 95% standard required by Subpart DD. During a period of drum vacuuming operations involving perchloroethylene/trichloroethylene/methylene chloride performed on December 8th, the system's removal efficiency dropped from about 80-91% to 30-35%. After a calibration period, the system's removal efficiency dropped to 0% for a period of about

one hour. On December 9th, the system's removal efficiency during distilling operations ranged from 0% to 46%, with efficiencies ranging from 0% to 8% for the last half hour.

- 33. In its discussion of the test results, the Test Report stated that "once any sort of load is put on the system (truck venting, drum vacuuming, etc.), the test data indicates that the system is drastically undersized based on the solvent loading as the outlet concentration rises quickly. In many instances, ... the exhaust concentration goes higher than the inlet concentration indicating that the carbon is releasing solvent into the air and the beds are 'air stripping' resulting in a 'negative' (reported as zero) efficiency." See Report, page 6.
- 34. In its August 2014 Information Request responses, Clean Harbors stated that no modifications were made to the carbon adsorption system from 2011 through May 2014.
- 35. Accordingly, the Cranston Facility has violated Subpart DD's emission standards for the Facility's carbon adsorption system.

C. Violations of 40 C.F.R. Part 63, Subpart EEEE

36. Subpart EEEE applies to the owner and operator of any facility ("plant site") that (a) is a major CAA HAP source, and (b) includes a non-gasoline organic liquids distribution ("OLD") operation. See 40 C.F.R. § 63.2334. "Organic liquids" are defined as any "non-crude oil liquid or liquid mixture that contains 5 percent by weight or greater of the organic HAP listed in Table 1 [to Subpart EEEE]." See 40 C.F.R. § 63.2406. An OLD operation is defined as "the combination of activities and equipment used to store or transfer organic liquids into, out of, or within a plant site." Id.

- 37. The Cranston Facility is a major HAP source that stores and transfers organic liquids into, out of and within the Facility. For example, in 2012-13, the Cranston Facility stored and transferred the following organic liquids, all of which are listed on Subpart EEEE's Table 1: ethylene glycol, perchloroethylene (tetrachloroethylene), methanol, methylene chloride and trichloroethylene.
 - 38. Accordingly, the Cranston Facility is subject to Subpart EEEE.
- 39. Regulated "affected sources" at a Subpart EEEE-subject facility such as the Cranston Facility include "[a]II storage tanks storing organic liquids." See 40 C.F.R. § 63.2338(b)(1). The Cranston Facility contains at least two organic liquid storage tanks identified to EPA as Tanks 17 and 18 that are affected sources under Subpart EEEE.
- 40. Subpart EEEE requires an owner and operator of an affected source to submit various notices and reports regarding Subpart EEEE compliance. See 40 C.F.R. §§ 63.2382 and 63.2386. The required notices and reports include an initial notification of applicability, a subsequent notice of compliance status, and semiannual compliance reports. See 40 C.F.R. §§ 63.2382(b) and (d), and 63.2386(b).
- 41. To date, Safety-Kleen has failed to submit any Subpart EEEE notices or compliance reports to EPA. Accordingly, Safety-Kleen has violated and continues to violate 40 C.F.R. §§ 63.2382 and 63.2386.
- 42. Subpart EEEE provides that an organic liquid storage tank with a capacity of 5,000 to 50,000 gallons, and an average true vapor pressure of the total Table 1 HAPs in its stored organic liquids of 4.0 psia or more, must comply with the emission limits set out in Table 2 of Subpart EEEE. See 40 C.F.R. § 63.2346 and Table 2.

- 43. At the Cranston Facility, Tanks 17 and 18 each have a capacity of 5,000 gallons and have stored organic liquids having an annual average true vapor pressure of total Table 1 HAPs of 4.0 psia or more.
- 44. Table 2 of Subpart EEEE requires that storage tanks such as the Cranston Facility's Tanks 17 and 18 reduce emissions of total organic HAP by at least 95% by weight by venting emissions through a closed vent system to a control device meeting the applicable requirements of 40 C.F.R. Part 63, Subpart SS (which includes carbon adsorbers), or by complying with specified work practice standards specified in Table 4 of Subpart EEEE.
- 45. The specified Table 4 work practice standards (which pertain to floating roof tanks, emissions routing to a fuel gas system or process, and vapor balancing) are not applicable to Tanks 17 and 18.
- 46. As described above in Section III.B., the Cranston Facility's carbon adsorption system, which controls emissions from Tanks 17 and 18, has failed to reduce total organic HAP by at least 95% by weight.
- 47. Accordingly, Safety-Kleen has violated Subpart EEEE's emission limits for Tanks 17 and 18.

D. Violation of CAA Title V Operating Permit Requirements

48. Rhode Island's Title V permit program requires that any major source, including a major HAP source, must apply for an operating permit within 12 months of commencing operation. See RI APC Regulations 29.1.14(a), 29.2.1(a), 29.4.1, and 29.4.2(e). After the time that a source is required to apply for an operating permit, the

source is prohibited from operating unless it is in compliance with an operating permit issued under Regulation 29. See RI APC Regulation 29.4.6

- 49. The CAA and its implementing regulations require a major source to apply for and obtain a Title V operating permit no later than 12 months after becoming subject to a state's approved operating permit program. See Section 503(c) of the CAA, 42 U.S.C. § 7661b(c), and 40 C.F.R. § 70.5(a)(1). The CAA prohibits major sources from operating except in compliance with a permit issued by a Title V permitting authority. See Section 502(a) of the CAA, 42 U.S.C. § 7661a(a) (Violations).
- 50. As described above in Section III.A, the Cranston Facility is a major HAP source. To date, Safety-Kleen has not applied for or obtained a Title V operating permit for the Facility, and has continued to operate the Facility without a Title V permit.

 Accordingly, Safety-Kleen has violated and continues to violate the CAA and its implementing regulations.

E. Violations of Rhode Island SIP

- 51. The SIP-approved version of RI APC Regulation 9.2.1 provides that no person may construct, install or modify, or cause the construction, installation or modification of any stationary source subject to RI APC Regulation 9 without obtaining an air pollution control permit.
- 52. The SIP-approved version of RI APC Regulation 9.3.1(g) provides that a minor source permit is required for the construction, installation or modification of any stationary source or process having the potential to emit 10 pounds per hour or 100 pounds per day of any air pollutant into the atmosphere.

- 53. The Cranston Facility's potential to emit exceeds 100 pounds of volatile organic compounds ("VOC") per day. Accordingly, Safety-Kleen requires a minor source air permit for the Cranston Facility pursuant to the SIP-approved version of the RI APC Regulation 9.3.1(g).
- 54. To date, Safety-Kleen has not applied for or obtained a minor source air permit regarding its VOC emisions at the Cranston Facility. Accordingly, Safety-Kleen has violated and continues to violate the Rhode Island SIP.

IV. ENFORCEMENT

- or all of the following actions regarding Safety-Kleen's violations of the Rhode Island SIP:

 (a) issue an order requiring compliance with the CAA; (b) issue an administrative penalty order; and/or (c) bring a civil action in federal district court for an injunction and/or monetary penalties up to \$37,500 per day for each violation. See Sections 113(a), (b) and (d) of the CAA, 42 U.S.C. §§ 7413(a), (b) and (d), and 40 C.F.R. Part 19 (CAA judicial and administrative penalties raised to \$37,500 for violations after January 12, 2009). EPA may take any of the above-listed actions at any time regarding any violation by Safety-Kleen of Subparts DD and EEEE, and of Title V's operating permit requirements.
- 56. If Safety-Kleen has knowingly violated the requirements of the CAA or its implementing regulations, Safety-Kleen and its responsible corporate officers may be subject to criminal penalties under Title 18 of the United States Code, imprisonment for not more than five years, or both. See Section 113(c) of the Act, 42 U.S.C. § 7413(c).

57. Be advised that issuance of this NOV does not preclude EPA from electing to pursue any other remedies or sanctions authorized by law that are available to address these or other violations by Safety-Kleen of the CAA and its implementing regulations.

V. OPPORTUNITY TO CONFER

58. If Safety-Kleen has any questions regarding this NOV, or wishes to request a meeting with EPA to discuss it, please have your legal counsel contact Steven J. Viggiani, Senior Enforcement Counsel, at (617) 918-1729 or at viggiani.steven@epa.gov.

VI. EFFECTIVE DATE AND APPLICABILITY

59. This NOV is effective as of the date signed below and applies to Safety-Kleen and its officers, agents, servants, employees, successors, and assigns, and to all persons, firms, and corporations acting under, through, or for Safety-Kleen. This NOV is not subject to Office of Management and Budget review under the Paperwork Reduction Act, 44 U.S.C. Chapter 35.

Susan Studlien, Director
Office of Environmental Stewardship
EPA Region I – New England

01/14/15 Date